Atty. reference: AI 394NP

CLAIM AMENDMENTS:

Claims 1-7 (canceled).

Claim 8 (currently amended): A steering rack comprising:

a steel bar for the steering rack that contains 0.50 to 0.60% by mass of C, 0.05 to 0.5% by mass of Si, 0.2 to 1.5% by mass of Mn, 0.0005 to 0.003% by mass of B, 0.005 to 0.05% by mass of Ti, 0.0005 to 0.1% by mass of Al, and 0.002 to 0.02% by mass of N_7N_7 .

a rack teeth forming portion formed in the steel bar and including plural rack teeth, a hardening layer having undergone induction quenching and tempering, and a surface hardness of 680 to 800 HV in Vickers hardness; and

a main body including the rack teeth forming portion on a peripheral surface thereof, a portion that opposes the rack teeth forming portion in a radius direction, and a portion present at a depth of (3/4)D from a surface of the portion that opposes the rack teeth forming portion in the radius direction, where D is a diameter of the main body.

wherein:

given D as a diameter of the steel bar, then the steel bar is and the steering rack are adjusted in such a manner that quenched and tempered structures in a portion of the steel bar at a depth of D/4 from a surface and quenched and tempered structures in the portion of the main body of the steering rack at the depth of (3/4)D both satisfy conditions I), II), and III) as follows:

10/558,359

Atty. reference: AI 394NP

I) a sum of a tempered bainitic structure and a tempered martensitic structure accounts for 30 to 100% in area percentage,

- II) a regenerated perlite structure accounts for 0 to 50% in area percentage, and
- III) a sum of the tempered bainitic structure, the tempered martensitic structure, and the regenerated perlite structure accounts for 50 to 100% in area percentage; percentage.

the steering rack formed using the steel bar and including a main body and a rack teeth forming portion, the rack teeth forming portion including plural rack teeth and provided as part of a peripheral surface of the main body;

a hardening layer having undergone induction quenching and tempering is provided at least to the rack teeth forming portion; and

the rack teeth forming portion has a surface hardness of 680 to 800 HV in Vickers hardness.

Claim 9 (canceled).

Claim 10 (original): A steering rack according to claim 8, wherein:

the rack teeth forming portion includes a teeth bottom portion; and
an effective case hardened depth in the teeth bottom portion is 0.1 to 1.5

mm from a surface of the teeth bottom portion.

Atty. reference: Al 394NP

Claim 11 (original): A steering rack according to claim 8, wherein:

the rack teeth forming portion includes a teeth bottom portion; and
an effective case hardened depth in the teeth bottom portion is 0.3 to 1.2

mm from a surface of the teeth bottom portion.

Claim 12 (original): A steering rack according to claim 8, wherein:

the rack teeth forming portion includes a teeth bottom portion; and
no residual ferrite is contained in the teeth bottom portion in a 0.1 mm deep
region from a surface thereof.

Claim 13-14 (canceled).